DOCUMENT RESUME

ED 378 102 SO 024 580

AUTHOR de Souza, Anthony R.; Downs, Roger M.
TITLE Geography for Life: National Geography Standards 1994. Executive Summary.
INSTITUTION Department of Education, Washington, DC.; National Endowment for the Humanities (NFAH), Washington, D.C.; National Geographic Society, Washington, DC.
REPORT NO ISBN-0-7922-2777-8; ISSN-0-7922-2775
PUB DATE 94
NOTE 40p.; For the full report, see ED 375 073. Prepared by the Geography Education Students Project. Contains numerous photographs which may not reproduce well.
AVAILABLE FROM National Geographic Society, Post Office Box 1640, Washington, DC 20013-1640.
PUB TYPE Reports - Descriptive (141)

EDRS PRICE MF01/PC02 Plus Postage.
DESCRIPTORS Cartography; Elementary Secondary Education; *Geographic Concepts; *Geography; *Geography Instruction; *Map Skills
IDENTIFIERS *Geographic Literacy; *National Geography Standards

ABSTRACT

This booklet is both an executive summary of "Geography for Life: National Geography Standards 1994" and an introduction to geography as an essential part of every child's education, and as an integral part of the lives of all U.S. citizens. The publication is illustrated on every page with photographs, paintings, graphs, and maps. It defines the power of geography and its beauty as the seeing, understanding, and appreciating of the web of relationships among people, places, and environments. Understanding geography, the path to competency in geography, and the components of geography are discussed. The 18 National Geography Standards are grouped into 6 essential elements: (1) the world in spatial terms; (2) places and regions; (3) physical systems; (4) human systems; (5) environment and society; and (6) the uses of geography. The skills and standards of each element are outlined. Using the standards for places and regions for grades K-4, the booklet demonstrates how a geography standard works and explains what the different parts of the standard and its structure mean. Two imperatives drive the National Standards for Geography: (1) geographic understanding must be set into a process of lifelong learning; (2) geographic understanding must be set into life contexts like school, family, society, and occupation. (DK)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

ED 378 102

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

X This document has been reproduced as received from the person or organization originating it

☐ Minor changes have been made to improve reproduction quality

• Points of view or opinions stated in this document do not necessarily represent official OERI position or policy

GEOGRAPHY *for life*

SO 024 580

BEST COPY AVAILABLE

GEOGRAPHY

NATIONAL GEOGRAPHY STANDARDS

BEST COPY AVAILABLE

Geography and geography education are essential to the future of all American children—starting now!

This publication is both an executive summary of *Geography for Life: National Geography Standards 1994* and an introduction to geography as a discipline, geography as an essential part of every child's education, and geography as an integral part of the lives of all Americans.

THE GEOGRAPHY EDUCATION STANDARDS PROJECT

This executive summary was written by Anthony R. de Souza and Roger M. Downs.

This publication has been prepared by the Geography Education Standards Project as part of *Geography for Life: National Geography Standards 1994* with grants from the U.S. Department of Education, the National Endowment for the Humanities, and the National Geographic Society.

The grants have been administered by the National Council for Geographic Education.

Grantees undertaking such projects are encouraged to express freely their professional judgment. This publication, therefore, does not necessarily represent positions or policies of the federal government, and no official endorsement should be inferred.

All rights reserved.
Printed in the United States of America
ISBN #0-7922-2777-8

Copyright © 1994
NATIONAL GEOGRAPHIC RESEARCH & EXPLORATION
1145 17th Street, N.W., Washington, D.C. 20036-4688

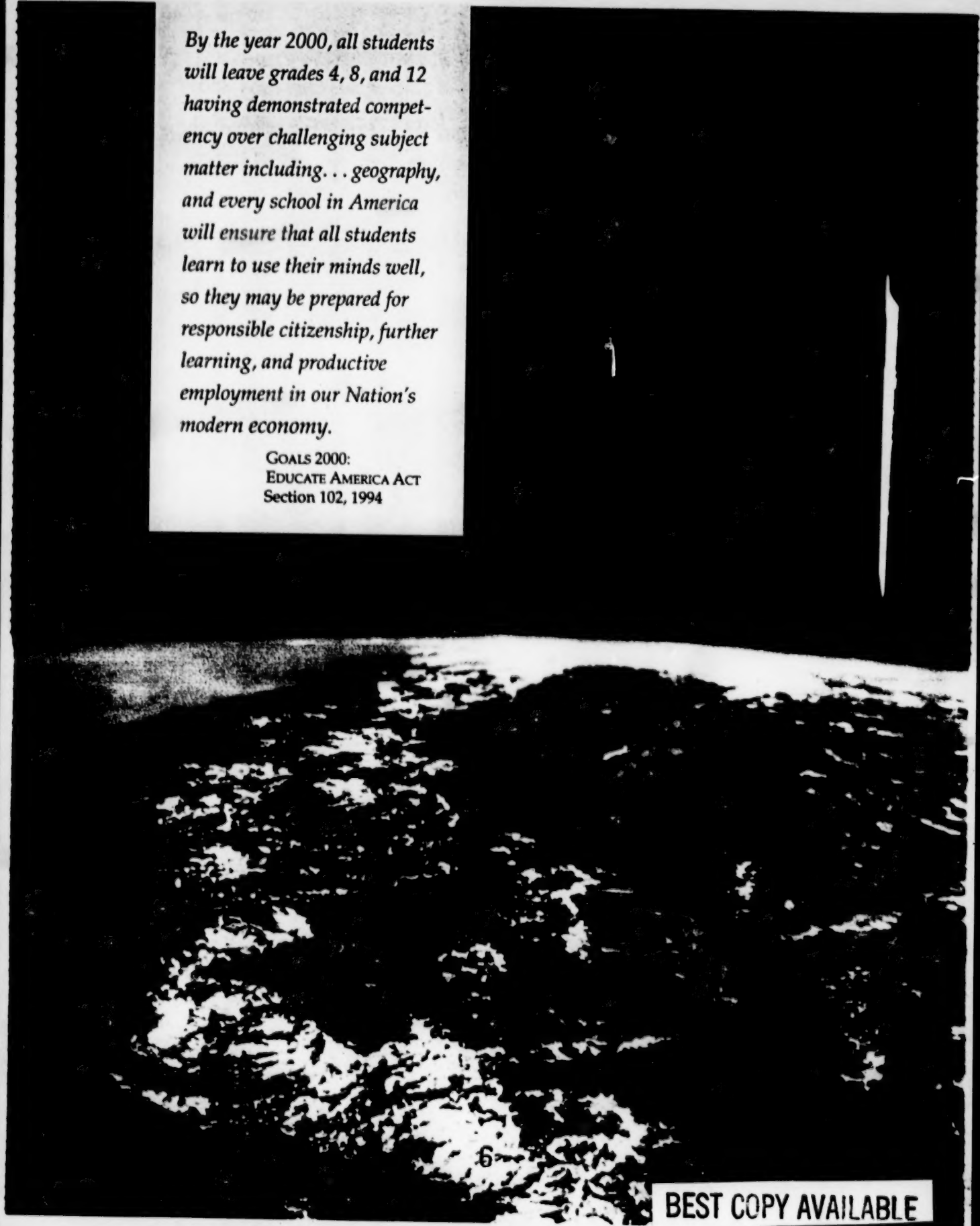
On behalf of the
AMERICAN GEOGRAPHICAL SOCIETY
ASSOCIATION OF AMERICAN GEOGRAPHERS
NATIONAL COUNCIL FOR GEOGRAPHIC EDUCATION
NATIONAL GEOGRAPHIC SOCIETY

BEST COPY AVAILABLE

BEST COPY AVAILABLE

By the year 2000, all students will leave grades 4, 8, and 12 having demonstrated competency over challenging subject matter including. . . geography, and every school in America will ensure that all students learn to use their minds well, so they may be prepared for responsible citizenship, further learning, and productive employment in our Nation's modern economy.

GOALS 2000:
EDUCATE AMERICA ACT
Section 102, 1994



BEST COPY AVAILABLE

The Power of Geography

By the year 2000, planet Earth will be more crowded, the physical environment more threatened, natural resources more depleted, the global economy more competitive, and world events more interconnected. Dealing with these challenges requires an understanding of geography.

Geography is the science of space and place on Earth's surface. Its subject matter is the physical and human phenomena that make up the world's environments and places. Geography asks us to look at the world as a whole, to understand the connections between places, to recognize that the local affects the global and vice versa.

The power and beauty of geography lie in seeing, understanding, and appreciating the web of relationships among people, places, and environments.

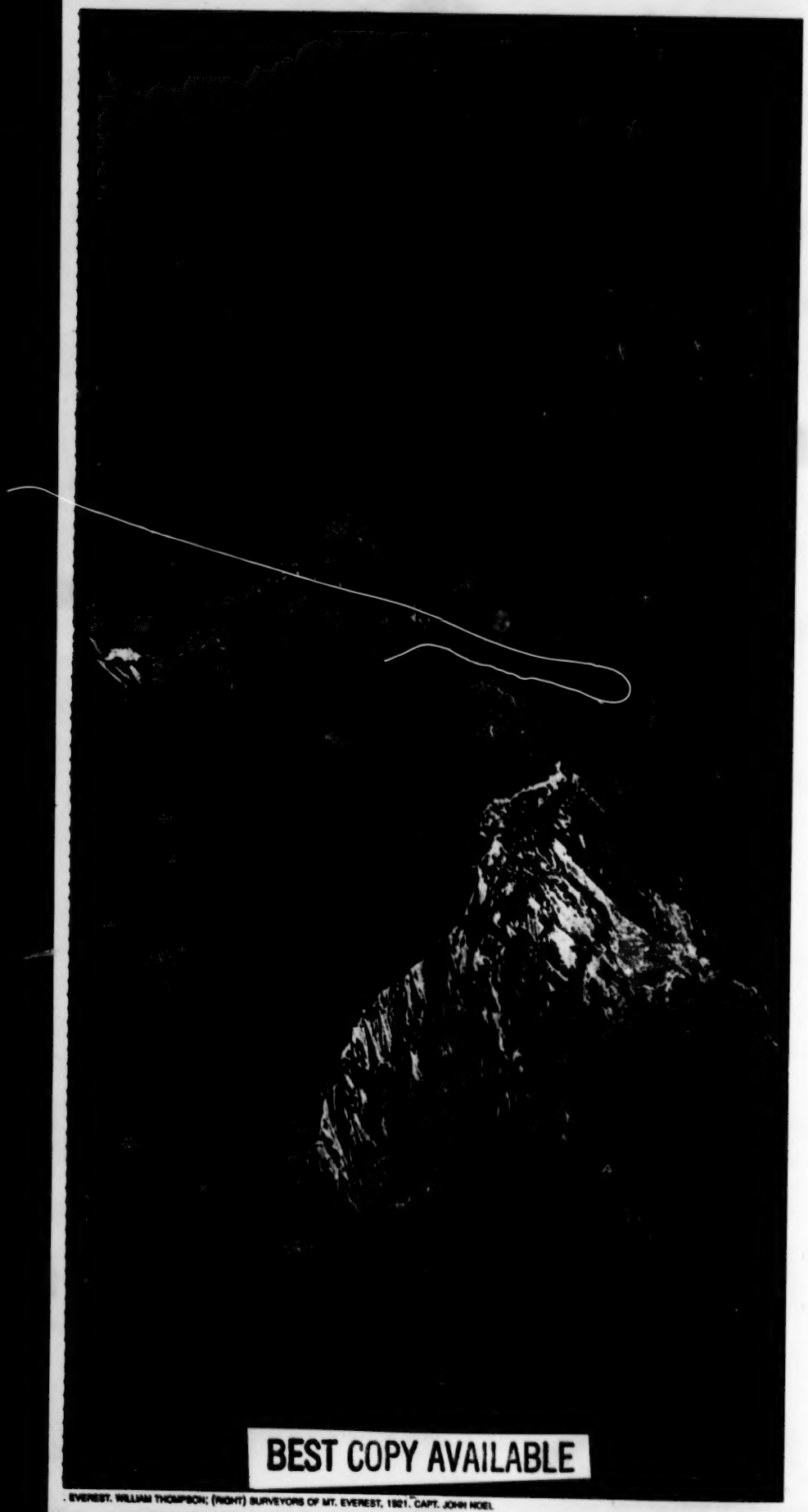
CHALLENGER OVER THE HIMALAYA, 1984. NASA
(ABOVE) MAPPING OF THE EVEREST REGION. © NATIONAL GEOGRAPHIC SOCIETY

BEST COPY AVAILABLE

One of geography's constant challenges is mapping Earth's surface, taking the experience of place and converting it into a graphic depiction. At 29,028 feet, Mount Everest presents challenges of physical access, of cartographic accuracy, and of graphic realization. The earliest maps were compiled in 1921 by two British surveyors, Henry Morshead and Oliver Wheeler. The artist in 1988 is airbrushing relief onto a detailed survey map of Mount Everest.

BEST COPY AVAILABLE

94 MAP OF THE HIMALAYA. (INSET) AIRBRUSHING RELIEF TO MAP OF MT EVEREST. ADAM WOOLFITT



BEST COPY AVAILABLE

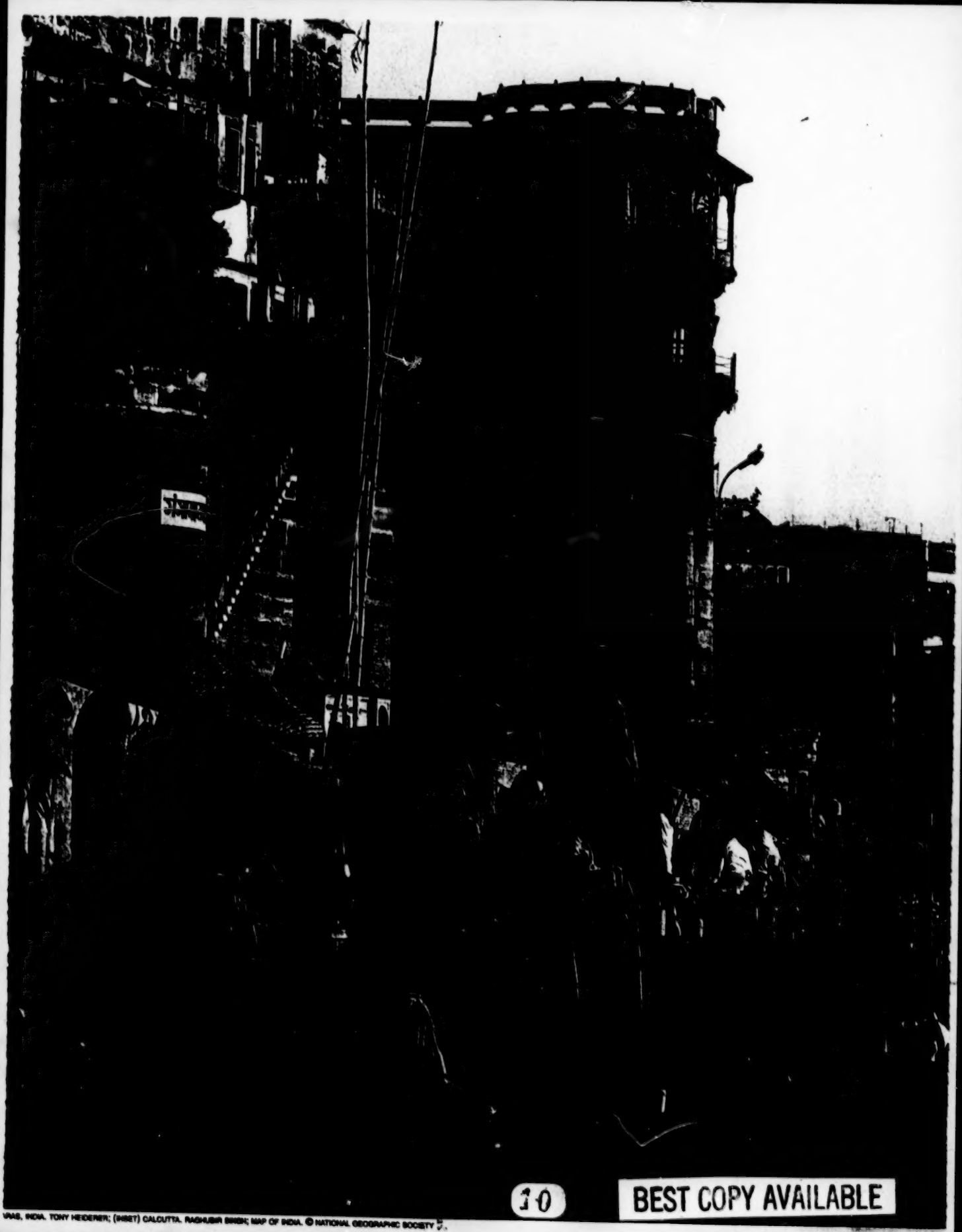
. EVEREST. WILLIAM THOMPSON; (RIGHT) SURVEYORS OF MT. EVEREST, 1921. CAPT. JOHN NOEL

Understanding Geography

Knowing that Mount Everest is the highest peak in the world is not understanding geography; we must know why it is the highest peak in the world. We must understand why its location as part of the Himalaya affects the Indian subcontinent in terms of access to water and flooding, and political security and conflict.

The Himalaya were created from the sediments of a shallow sea when the Indian subcontinent split from Gondwana and crashed into Eurasia, crumpling the crust. Uplifting and folding continue, so too do weathering and erosion. These processes have impacts throughout the northern Indian subcontinent because major river systems—the Ganges–Brahmaputra and the Indus—have their headwaters in the Himalaya. The eroded material is carried downstream fertilizing floodplains, the agricultural base for millions of people. Monsoon-caused flooding has been exacerbated by the loss of topsoil, a result of deforestation and farming practices. These upstream–downstream connections spur political tensions among countries that share a river system.

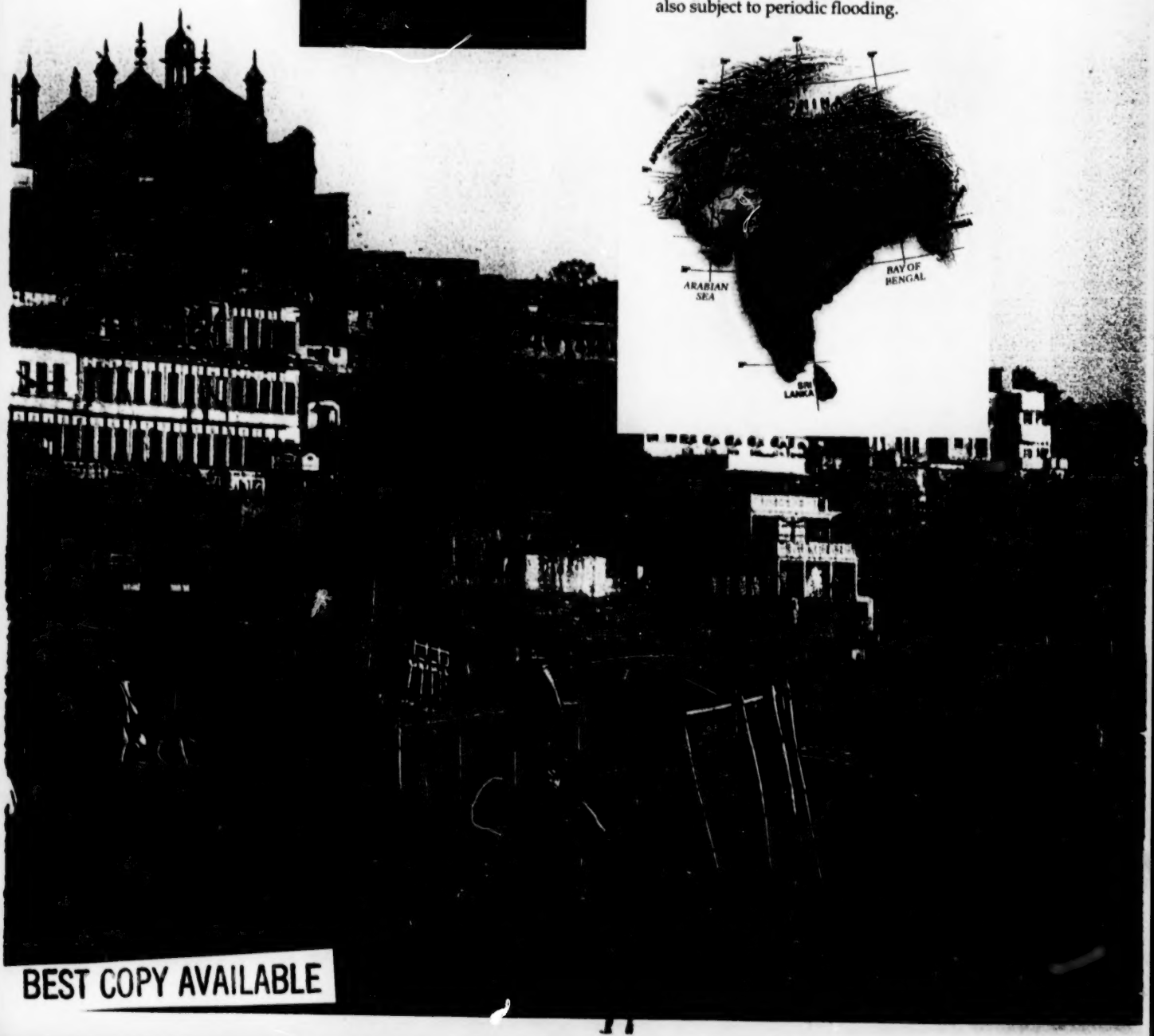
To a geographer, Mount Everest, the ecological nerve center of the Indian subcontinent, can only be understood in its interlinked physical and human spatial contexts.



BEST COPY AVAILABLE

VAS, INDIA. TONY HEDERER; (INSET) CALCUTTA. RAGHUBIR SINGH; MAP OF INDIA. © NATIONAL GEOGRAPHIC SOCIETY

Not only are rivers physical systems, they can also be imbued with powerful human meaning. Varanasi (Banaras), on the banks of the Ganges River, is one of the world's oldest cities and to many the religious capital of India. Every year tens of thousands of pilgrims visit one of the temples at Varanasi and bathe in the river. By contrast to Varanasi, which preserves the traditions of Hindu India, is Calcutta on the delta of the lower Ganges. From a small village 300 years ago, it has grown to become the largest city in India with a population of more than 11 million. This bustling, jostling city is the center of India's eastern industrial region. Situated in the midst of a rich rice-producing area, Calcutta is also subject to periodic flooding.



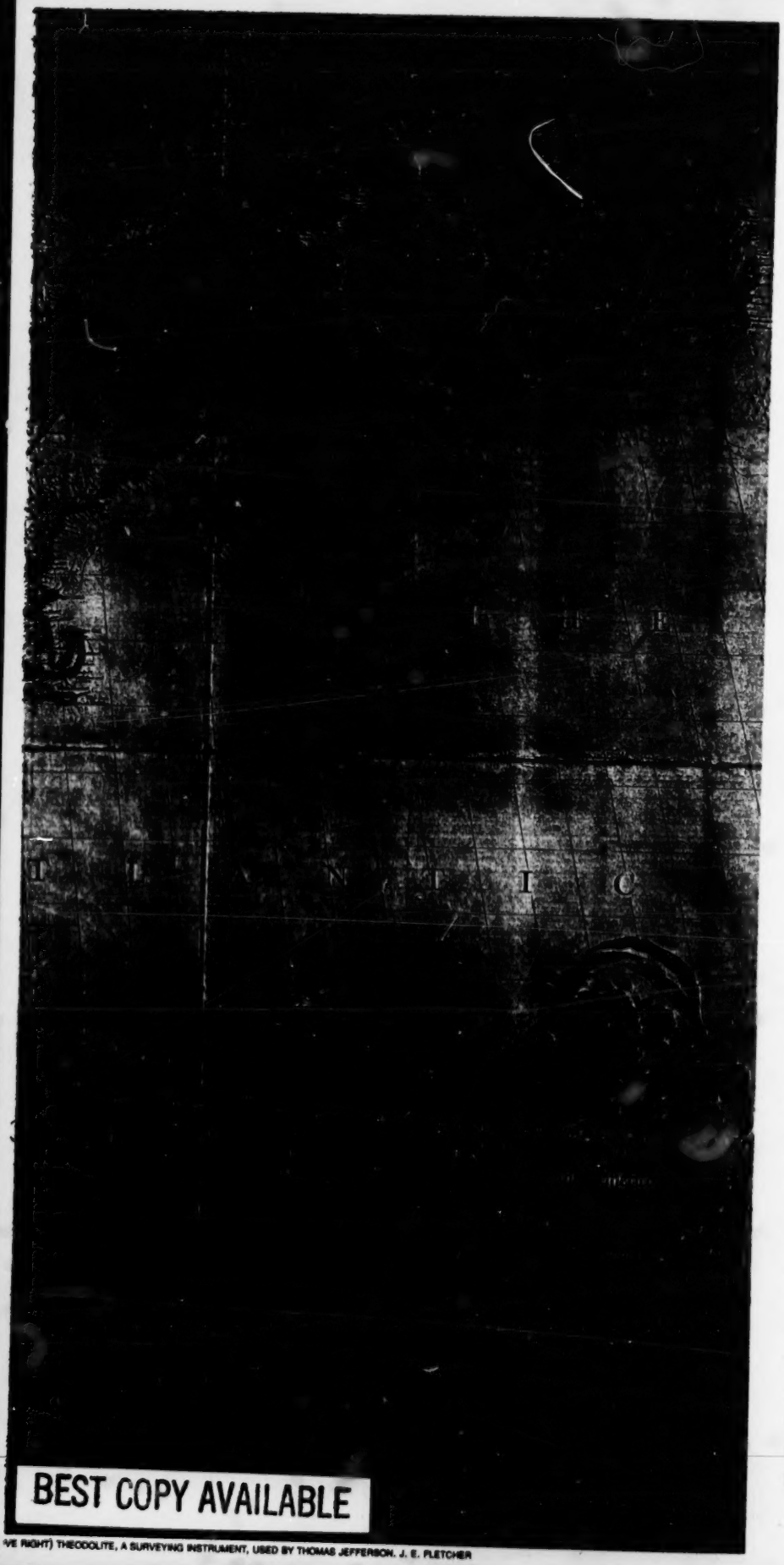
BEST COPY AVAILABLE

"I must study politics and war that my [children] may have liberty to study mathematics and philosophy. My [children] ought to study mathematics and philosophy, geography, natural history, naval architecture, navigation, commerce, and agriculture, in order to give their children a right to study painting, poetry, music, architecture, statuary, tapestry, and porcelain."

JOHN ADAMS
letter to Abigail Adams,
12 May 1780

BEST COPY AVAILABLE

N MITCHELL'S 1755 MAP OF THE EASTERN UNITED STATES. JOSEPH H. BAILEY; (INSET) PORTRAIT OF JOHN ADAMS BY JOHN TRUMBULL. NATIONAL PORTRAIT GALLERY, SMITHSONIAN INSTITUTION



BEST COPY AVAILABLE

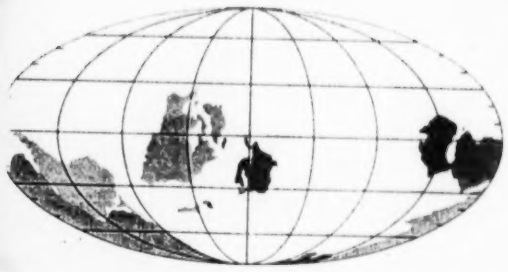
(VE RIGHT) THEODOLITE, A SURVEYING INSTRUMENT, USED BY THOMAS JEFFERSON. J. E. FLETCHER

Path to Competency in Geography

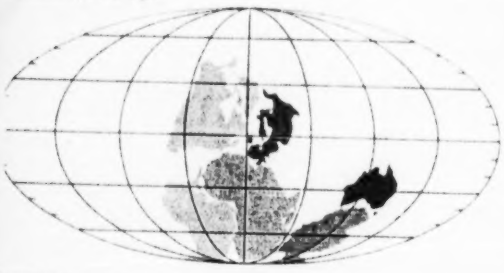
The inclusion of geography as a core subject in Goals 2000: Educate America Act is the culmination of a decade of reform in geography education. There is a widespread acceptance that being competent in geography is essential if students are to leave school equipped to earn a decent living, enjoy life, and participate responsibly in local, national, and international affairs. In response, educators, parents, as well as members of business, professional, and civic organizations have built a national consensus regarding content in geography and produced *Geography for Life: National Geography Standards 1994*.

Standards for geography identify what American students should learn—a set of voluntary benchmarks that every school and school district may use as guidelines for developing their own curricula. These standards for grades K–4, 5–8, and 9–12 specify the essential subject matter, skills, and perspectives that all students should have in order to attain high levels of competency. The standards provide every parent, teacher, curriculum developer, and business and policy leader with a set of challenging expectations in geography for all students.

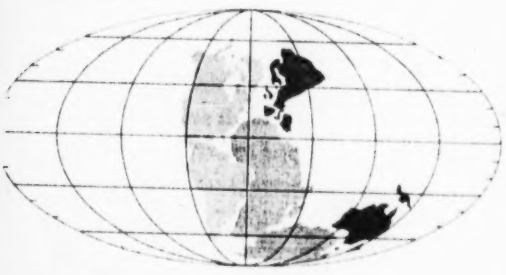
The purpose of standards for geography is to bring all students up to internationally competitive levels. For the United States to prosper in the twenty-first century, the education system must be tailored to the needs of productive and responsible citizenship in the global economy.



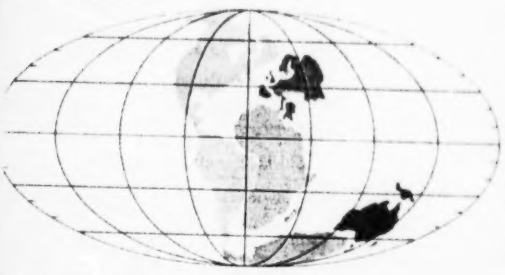
) million years ago



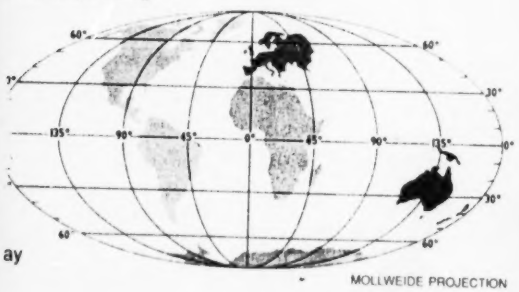
) million years ago



) million years ago



) million years ago

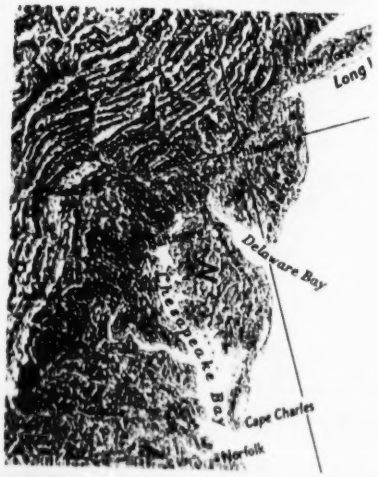


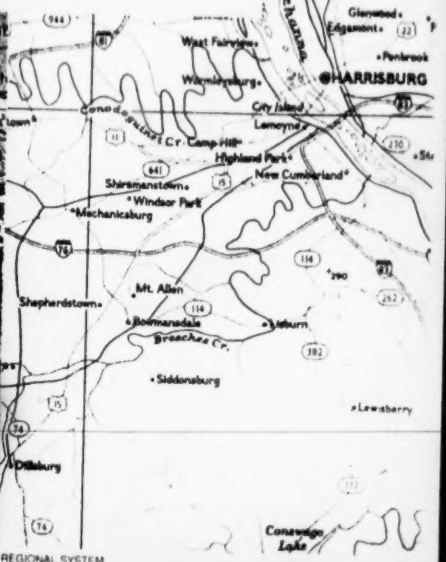
ay

MOLLWEIDE PROJECTION

These two sequences of images depict patterns on Earth's surface at very different spatial and temporal scales. The simple line drawings of the world depict the drifting continents over hundreds of millions of years coalescing and then dividing. The four maps of the Susquehanna River depict the same place captured in the 1980s, in sequence, as a geologic map, a regional system, a topographic pattern, and a Landsat image. Both sequences help us to answer what is where and how and why it got there. In one case, the answer lies in fundamental physical processes; in the other, in the subtle interaction between physical and human processes.

GEOLOGIC MAP





REGIONAL SYSTEM

ALL MAPS, © NATIONAL GEOGRAPHIC SOCIETY

BEST COPY AVAILABLE

The Components of Geography

Geography consists of three interrelated and inseparable components: subject matter, skills, and perspectives. The subject matter, a distillation of essential knowledge, is the foundation for the National Geography Standards. Subject matter is the basis on which geographic skills are brought to bear. These skills are: asking geographic questions, acquiring geographic information, organizing geographic information, analyzing geographic information, and answering geographic questions. Knowledge and skills must be viewed from two perspectives: spatial and ecological. The spatial perspective focuses on spatial patterns and processes on Earth's surface, and the ecological perspective focuses on the complex web of relationships between living and nonliving elements on Earth's surface.

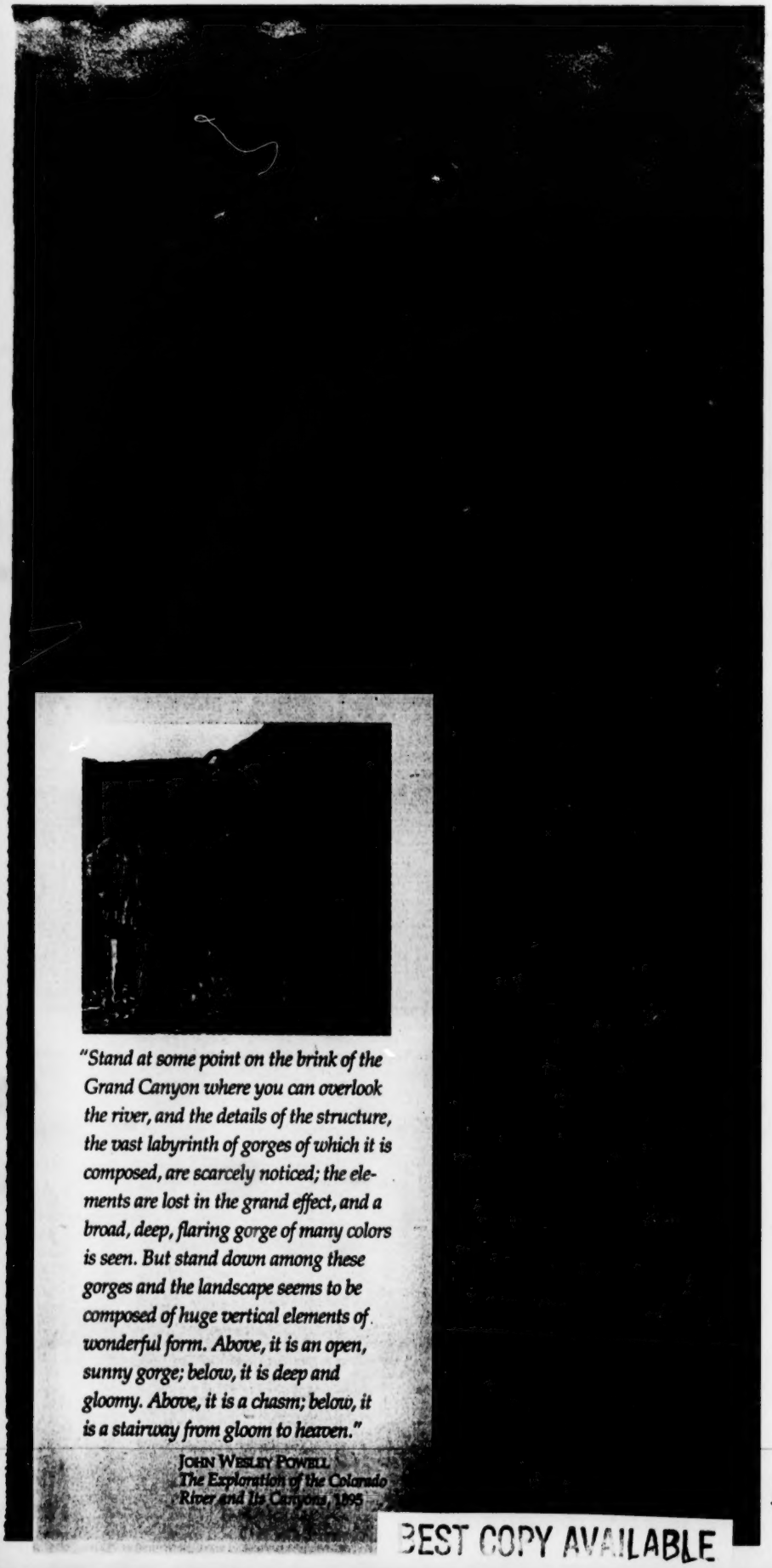
Mastering any single component of geography is not equivalent to mastering geography. The components (subject matter, skills, and perspectives) are necessary but not sufficient for being geographically competent. None of the three elements can stand alone.

(ABOVE) 1985 COMPUTER-GENERATED IMAGE OF THE EARTH STRIPPED OF ITS OCEANS. COLORS INDICATE DIFFERENCES IN ELEVATION—NOTE THE SHALLOW AREAS OFF FLORIDA AND THE BERING STRAIT. WASHINGTON UNIVERSITY, ST. LOUIS

BEST COPY AVAILABLE

BEST COPY AVAILABLE

VA AND BRADFORD WASHBURN SURVEYING THE GRAND CANYON, BRIGHT ANGEL POINT, IN 1972. CHARLES O'REAR; (INSET) JOHN WESLEY POWELL ON HORSEBACK IN THE GRAND CANYON. SMITHSONIAN INSTITUTION



"Stand at some point on the brink of the Grand Canyon where you can overlook the river, and the details of the structure, the vast labyrinth of gorges of which it is composed, are scarcely noticed; the elements are lost in the grand effect, and a broad, deep, flaring gorge of many colors is seen. But stand down among these gorges and the landscape seems to be composed of huge vertical elements of wonderful form. Above, it is an open, sunny gorge; below, it is deep and gloomy. Above, it is a chasm; below, it is a stairway from gloom to heaven."

JOHN WESLEY POWELL
The Exploration of the Colorado River and Its Canyons, 1895

BEST COPY AVAILABLE

The National Geography Standard

Geography looks at Earth as a physical object, as a physical environment, and as a human place. Geography also asks us to look at the world as a whole, to understand the connections between places, and to recognize that the local affects the global and vice versa.

To build an understanding of a spatially interconnected world, we need to identify the most important and enduring ideas in geography and to develop a framework that will allow students to learn about geography in a logical, coherent, and accessible way starting in kindergarten and ending in twelfth grade.

There are eighteen National Geography Standards that are grouped into six essential elements:

The World in Spatial Terms
Places and Regions
Physical Systems
Human Systems
Environment and Society
The Uses of Geography

(ABOVE) EXPLORING THE GRAND CANYON.
JAMES C. RICHARDSON

The Six Essential Elements of Geography

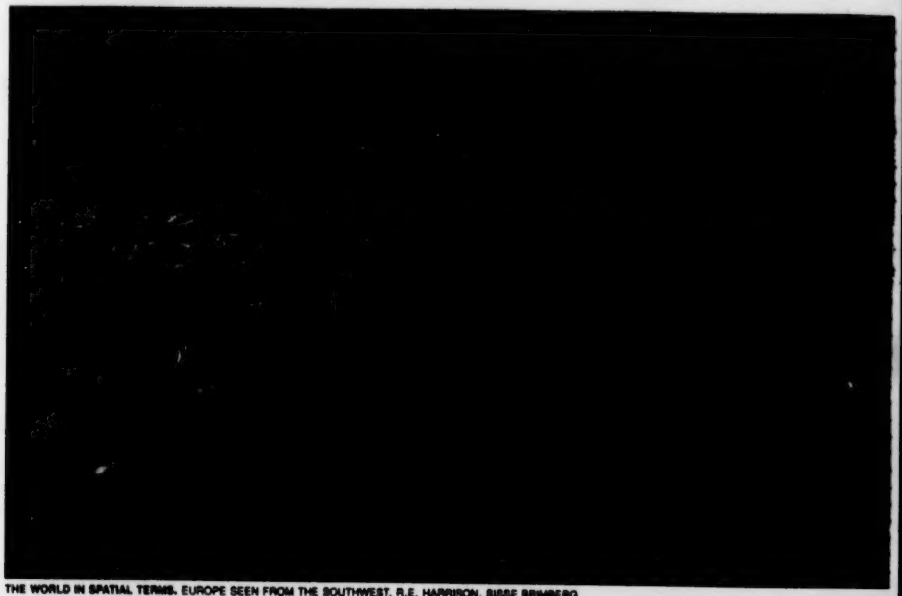
By essential we mean that each piece is central and necessary: We must look at the world in this way. By element we mean that each piece is a building block for the whole. Each essential element contains a number of geography standards. Each standard presents a set of ideas and approaches that a geographically informed person needs to know and understand.

The World in Spatial Terms

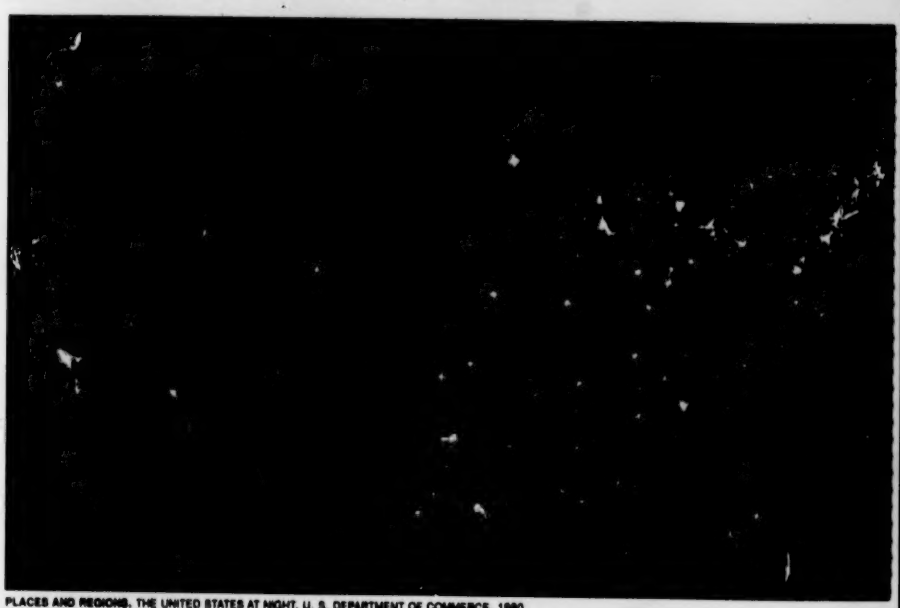
Geography studies the relationships between people, places, and environments by mapping information about them into a spatial context.

Places and Regions

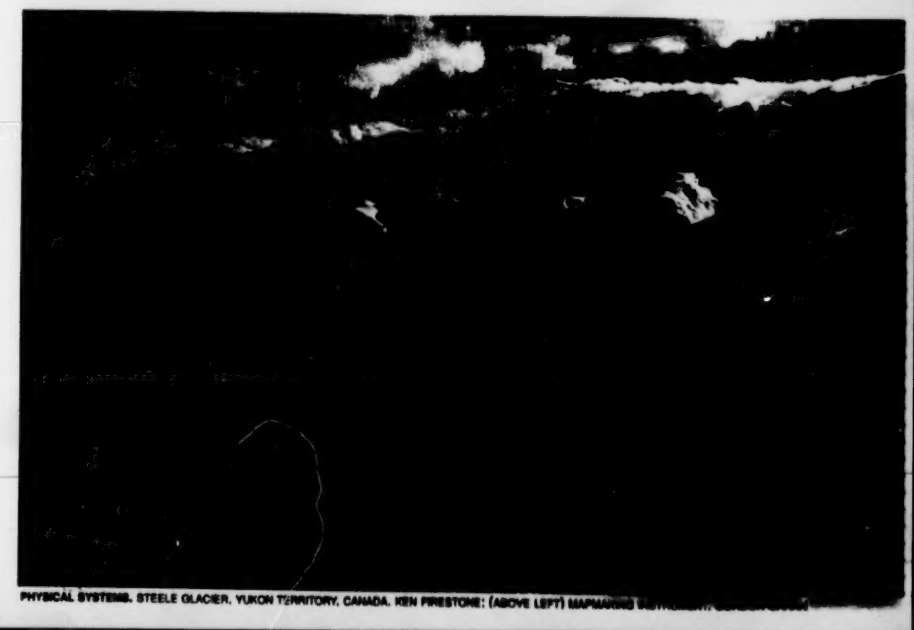
The identities and lives of individuals and peoples are rooted in particular places and in those human constructs called regions.



THE WORLD IN SPATIAL TERMS. EUROPE SEEN FROM THE SOUTHWEST. R.E. HARRISON. BISSE BRIMBERG



PLACES AND REGIONS. THE UNITED STATES AT NIGHT. U. S. DEPARTMENT OF COMMERCE, 1980



PHYSICAL SYSTEMS. STEELE GLACIER, YUKON TERRITORY, CANADA. KEN FIRESTONE; (ABOVE LEFT) MAPMAKING

BEST COPY AVAILABLE

AN SYSTEMS. IMMIGRANTS ON THE DECK OF *S.S. AMERIKA* ARRIVE IN NEW YORK IN 1905. UNIVERSITY OF CALIFORNIA, RIVERSIDE

IRONMENT AND SOCIETY. THE SAHEL, NIGER. STEVE McCURRY

BEST COPY AVAILABLE

Physical Systems

Physical processes shape Earth's surface and interact with plant and animal life to create, sustain, and modify ecosystems.

Human Systems

People are central to geography in that human activities help shape Earth's surface, human settlements and structures are part of Earth's surface, and humans compete for control of Earth's surface.

Environment and Society

The physical environment is modified by human activities, largely as a consequence of the ways in which human societies value and use Earth's natural resources, and human activities are also influenced by Earth's physical features and processes.

The Uses of Geography

Knowledge of geography enables people to develop an understanding of the relationships between people, places, and environments over time—that is, of Earth as it was, is, and might be.

he World
ı Spatial Terms

e geographically informed person
ows and understands . . .

1.

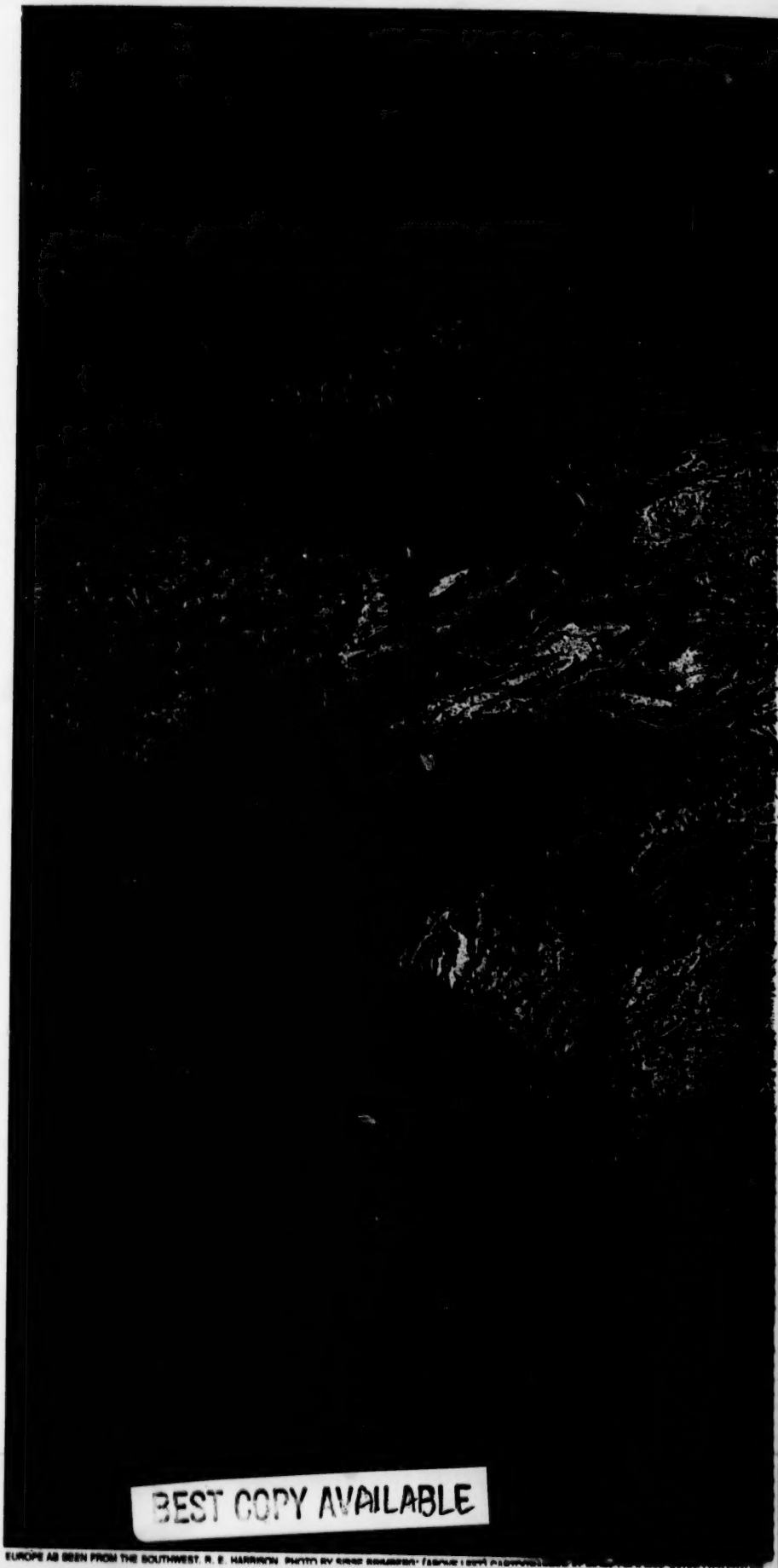
w to use maps and other geographic representations, tools, and technologies to acquire, process, and report information from a spatial perspective.

2.

w to use mental maps to organize information about people, places, and environments in a spatial context.

3.

w to analyze the spatial organization of people, places, and environments on Earth's surface.



EUROPE AS SEEN FROM THE SOUTHWEST. R. E. HARRISON. PHOTO BY SPACE SHUTTLE [illegible]

BEST COPY AVAILABLE

Richard Edes Harrison shaped American cartography with his arresting images of spatial relationships and his eye for graphic design. This 1944 map of Europe viewed from the southwest challenges our conception of what this familiar part of the world looks like. Hand-drawn before satellites and computers, the map reminds us of Earth's curvature, of topography, of the pivotal role of the Mediterranean—that "continent-dividing sea" in Harrison's words. It shows the power of images to shape and reshape how we see our world.

BEST COPY AVAILABLE

laces and Regions

ıe geographically informed person
ıows and understands . . .

4.

e physical and human characteristics of places.

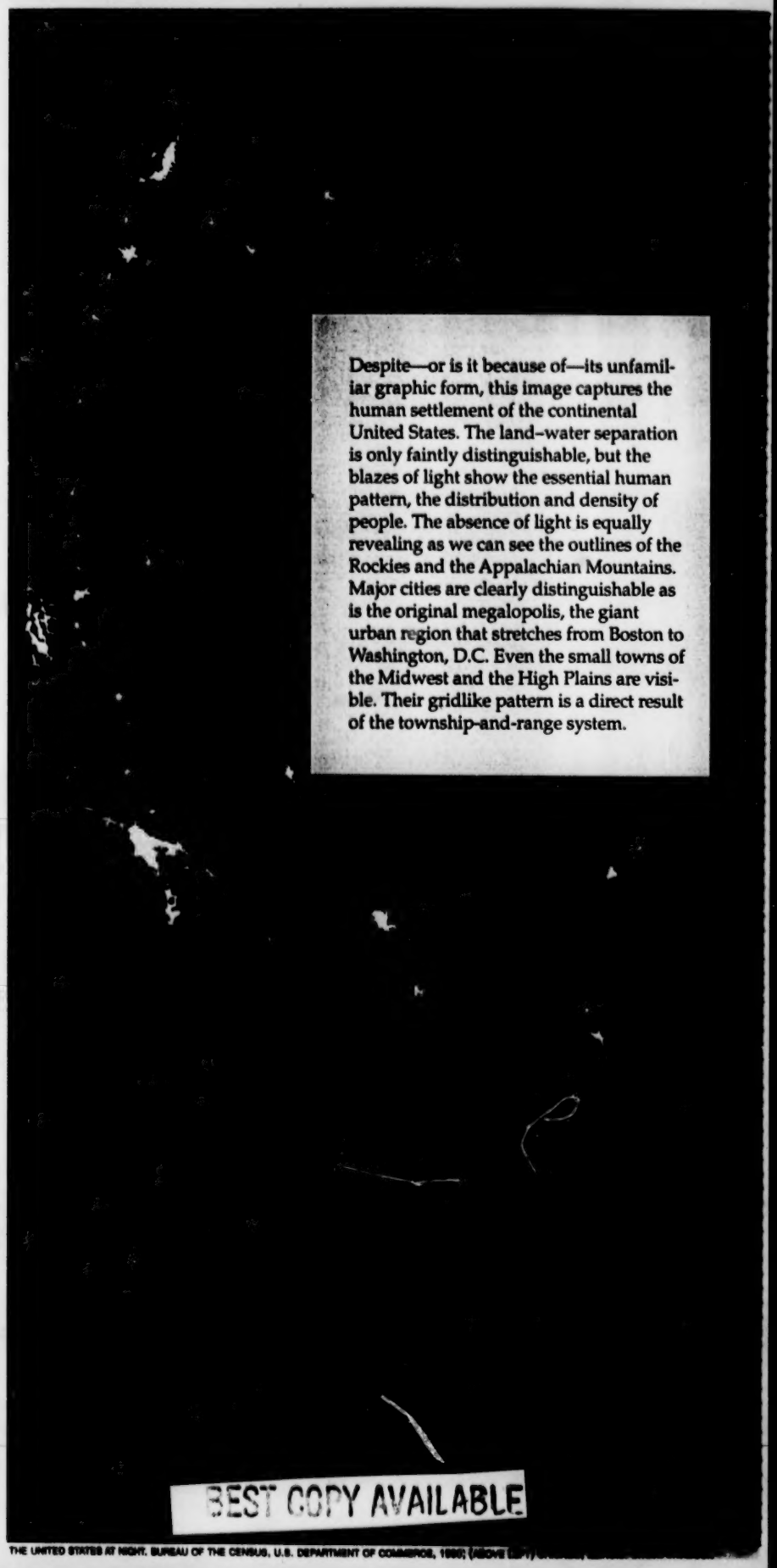
5.

at people create regions to interpret Earth's complexity.

6.

ıw culture and experience influence people's perceptions of places and regions.

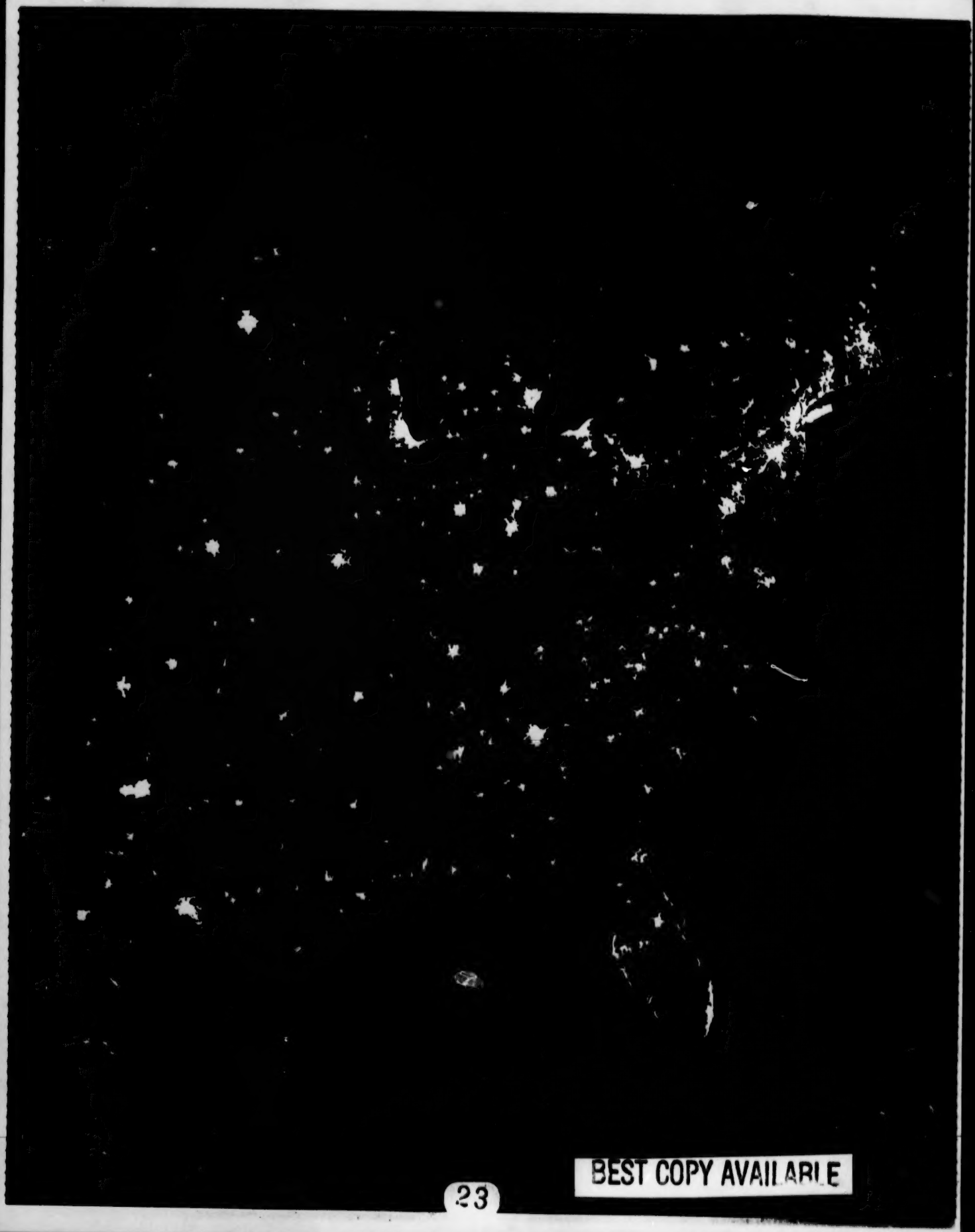
RANSOM, NORTH DAKOTA, 1986. ANNE GRIFFITHS-BELT



Despite—or is it because of—its unfamiliar graphic form, this image captures the human settlement of the continental United States. The land–water separation is only faintly distinguishable, but the blazes of light show the essential human pattern, the distribution and density of people. The absence of light is equally revealing as we can see the outlines of the Rockies and the Appalachian Mountains. Major cities are clearly distinguishable as is the original megalopolis, the giant urban region that stretches from Boston to Washington, D.C. Even the small towns of the Midwest and the High Plains are visible. Their gridlike pattern is a direct result of the township-and-range system.

BEST COPY AVAILABLE

THE UNITED STATES AT NIGHT. BUREAU OF THE CENSUS, U.S. DEPARTMENT OF COMMERCE, 1990) (ABOVE LEFT)



BEST COPY AVAILABLE

'hysical Systems

ıe geographically informed person ıows and understands . . .

7.

e physical processes that shape the patterns of Earth's surface.

8.

e characteristics and spatial distribution of ecosystems on Earth's surface.

ORA NATIONAL PARK, HONDURAS. DAVID ALAN HARVEY

BEST COPY AVAILABLE

STEELE GLACIER, YUKON TERRITORY, CANADA. KEN FIRESTONE; (ABOVE LEFT) BIG BEND NATIONAL PARK, TEXAS. LARRY LOWEN

Water covers more than 70 percent of Earth's surface. Most of it—97 percent—consists of the salt water of the oceans. Of the remainder, more than 80 percent is locked up in ice caps and glaciers. Glaciation has been one of the major sculptors of Earth's surface. Moving ice abrades the surface, picks up material, and eventually deposits the material along the sides and at the end of the glacier. The resulting features range from mound-like moraines to egg-shaped drumlins to vast sheets of till and boulder clay. Quite contrary to the ice deserts that characterize high latitudes and high elevations are areas with a tropical wet climate. Rain forests, thought to contain [illegible] half of Earth's animal and plant [illegible] are dominant there.

BEST COPY AVAILABLE

Human Systems

ıe geographically informed person
ıows and understands . . .

9.

e characteristics, distribution, and migration of human populations on Earth's surface.

10.

e characteristics, distribution, and complexity of Earth's cultural mosaics.

11.

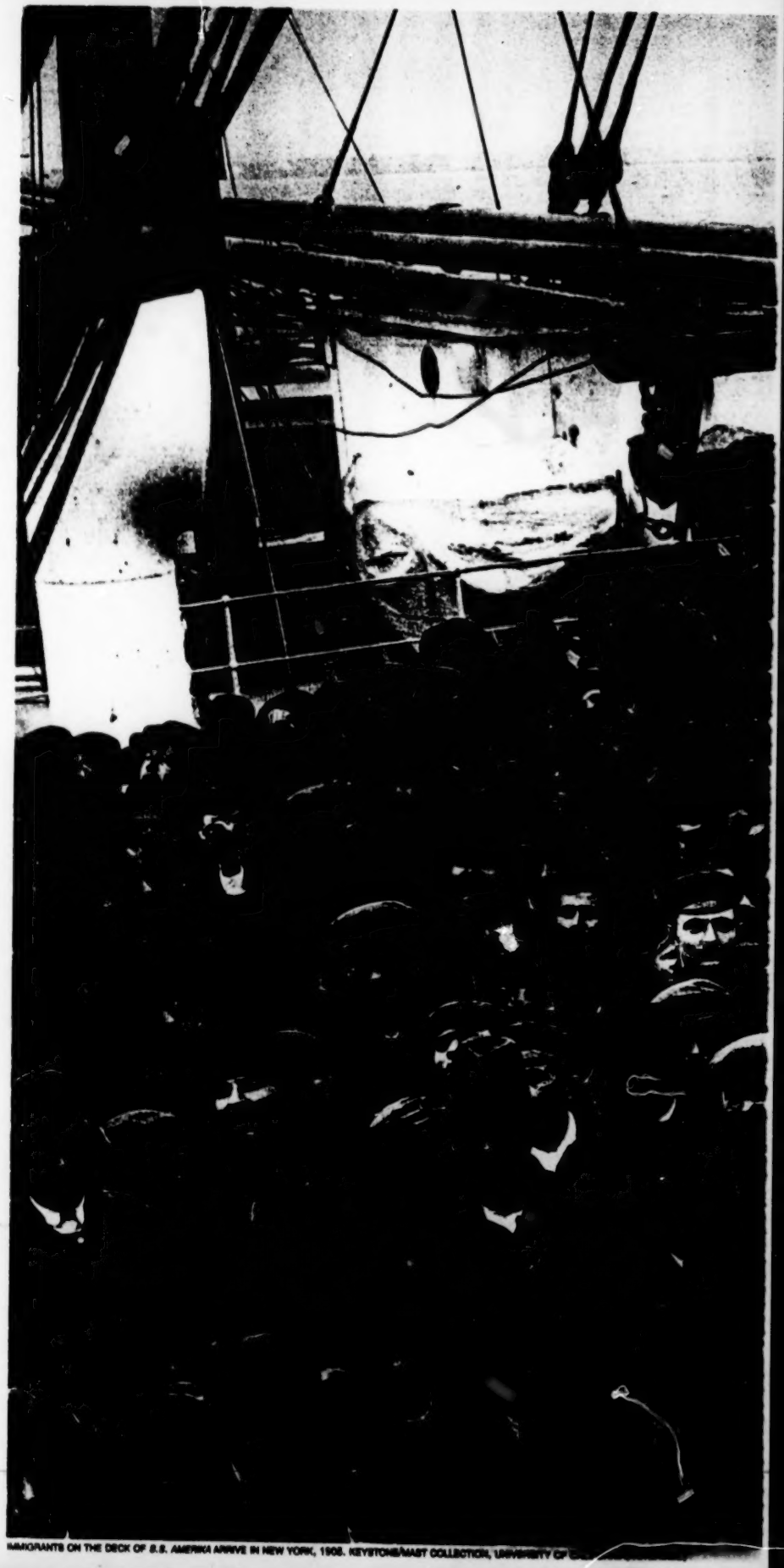
e patterns and networks of economic interdependence on Earth's surface.

12.

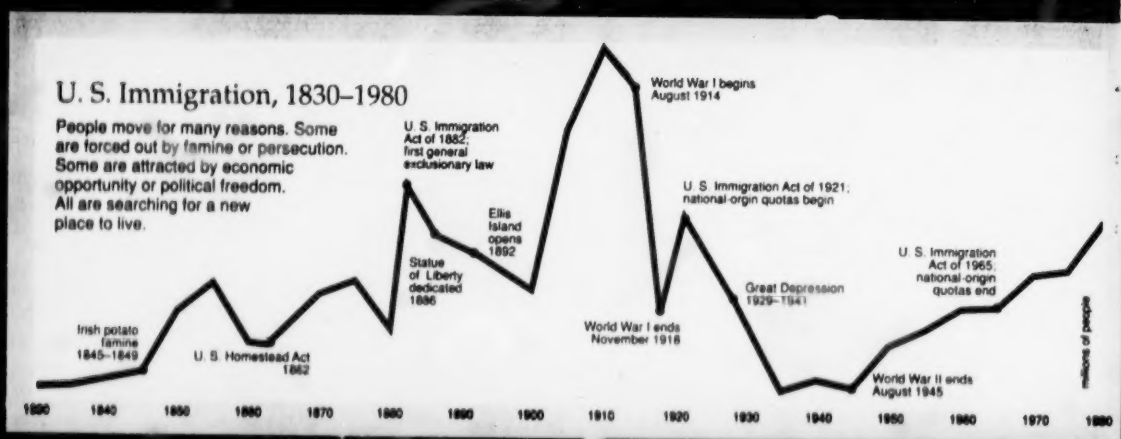
e processes, patterns, and functions of human settlement.

13.

ıw the forces of cooperation and conflict among people influence the division and control of Earth's surface.



IMMIGRANTS ON THE DECK OF *S.S. AMERIKA* ARRIVE IN NEW YORK, 1908. KEYSTONE/MAST COLLECTION, UNIVERSITY OF


U. S. Immigration, 1830–1980
People move for many reasons. Some are forced out by famine or persecution. Some are attracted by economic opportunity or political freedom. All are searching for a new place to live.
Irish potato famine 1845–1849
U. S. Homestead Act 1862
Statue of Liberty dedicated 1886
U. S. Immigration Act of 1882; first general exclusionary law
Ellis Island opens 1892
World War I begins August 1914
World War I ends November 1918
U. S. Immigration Act of 1921; national-origin quotas begin
Great Depression 1929–1941
World War II ends August 1945
U. S. Immigration Act of 1965; national-origin quotas end
millions of people
1830
1840
1850
1860
1870
1880
1890
1900
1910
1920
1930
1940
1950
1960
1970
1980

(ABOVE LEFT) STATUE OF LIBERTY, ROBERT SACHA

BEST COPY AVAILABLE

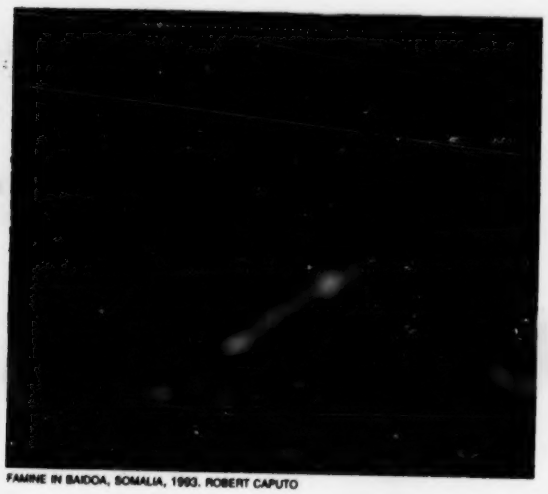
Environment and Society

The geographically informed person knows and understands . . .

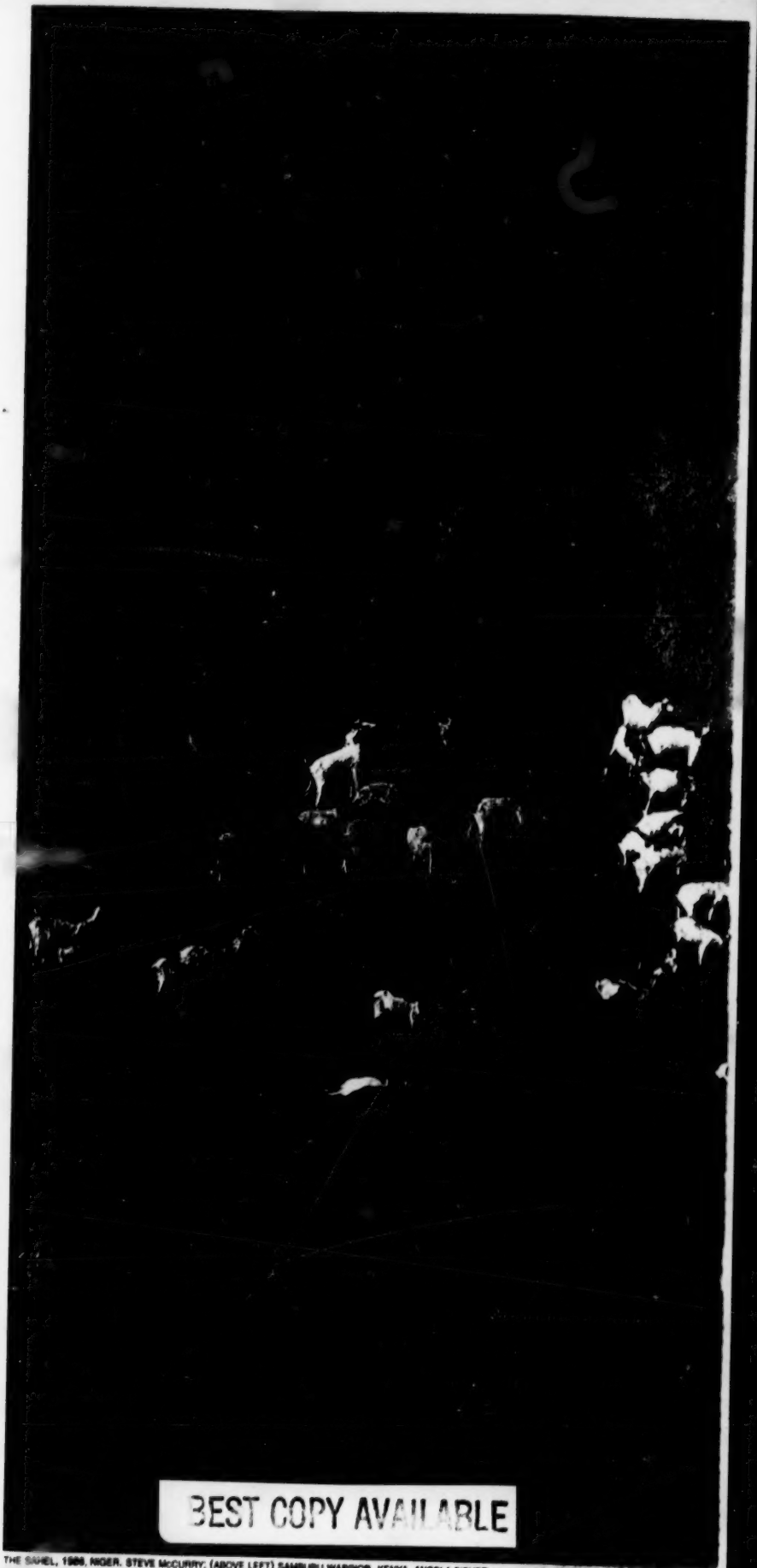
14. how human actions modify the physical environment.

15. how physical systems affect human systems.

16. the changes that occur in the meaning, use, distribution, and importance of resources.



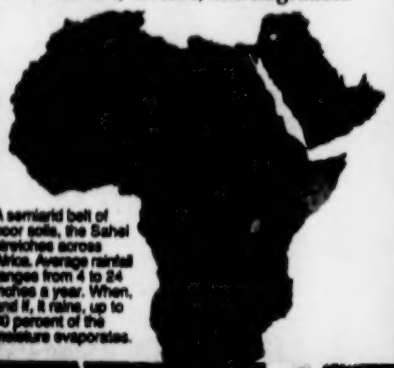
FAMINE IN BAIDOA, SOMALIA, 1993. ROBERT CAPUTO



BEST COPY AVAILABLE

THE SAHEL, 1986, NIGER. STEVE McCURRY; (ABOVE LEFT) SAMBURU WARRIOR, KENYA. ANGELA FISHER

The Sahel, a vast strip across north-central Africa, is menaced by the threat of spreading deserts. In a region where rainfall is relatively low and annual amounts vary significantly, human occupancy can be precarious. If, as is the case, population is growing, then the risk of disaster is great. As demands for wood, food, and water increase, so does the pressure on the physical environment. If rainfall declines over a period of years, then environmental stresses reach a point where the original ecosystem—the relationships among soil, biota, and climate of the area—is destroyed. And the human occupants face the potential of famine, disease, and migration.



A semiarid belt of poor soils, the Sahel stretches across Africa. Average rainfall ranges from 4 to 24 inches a year. When, and if, it rains, up to 80 percent of the moisture evaporates.

BEST COPY AVAILABLE

The Uses of Geography

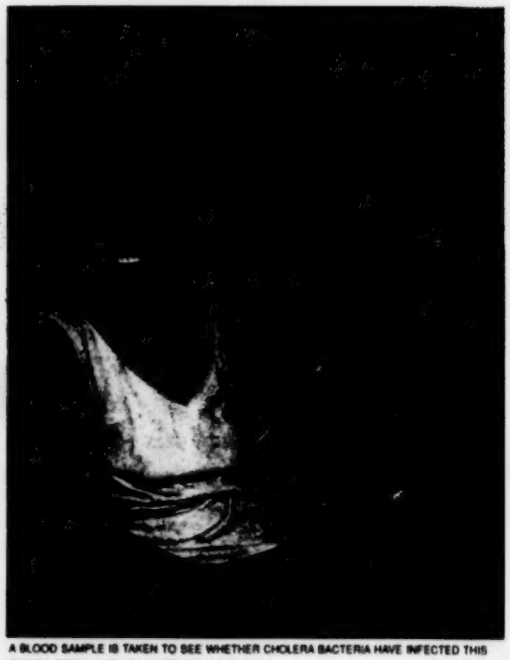
The geographically informed person knows and understands . . .

17.

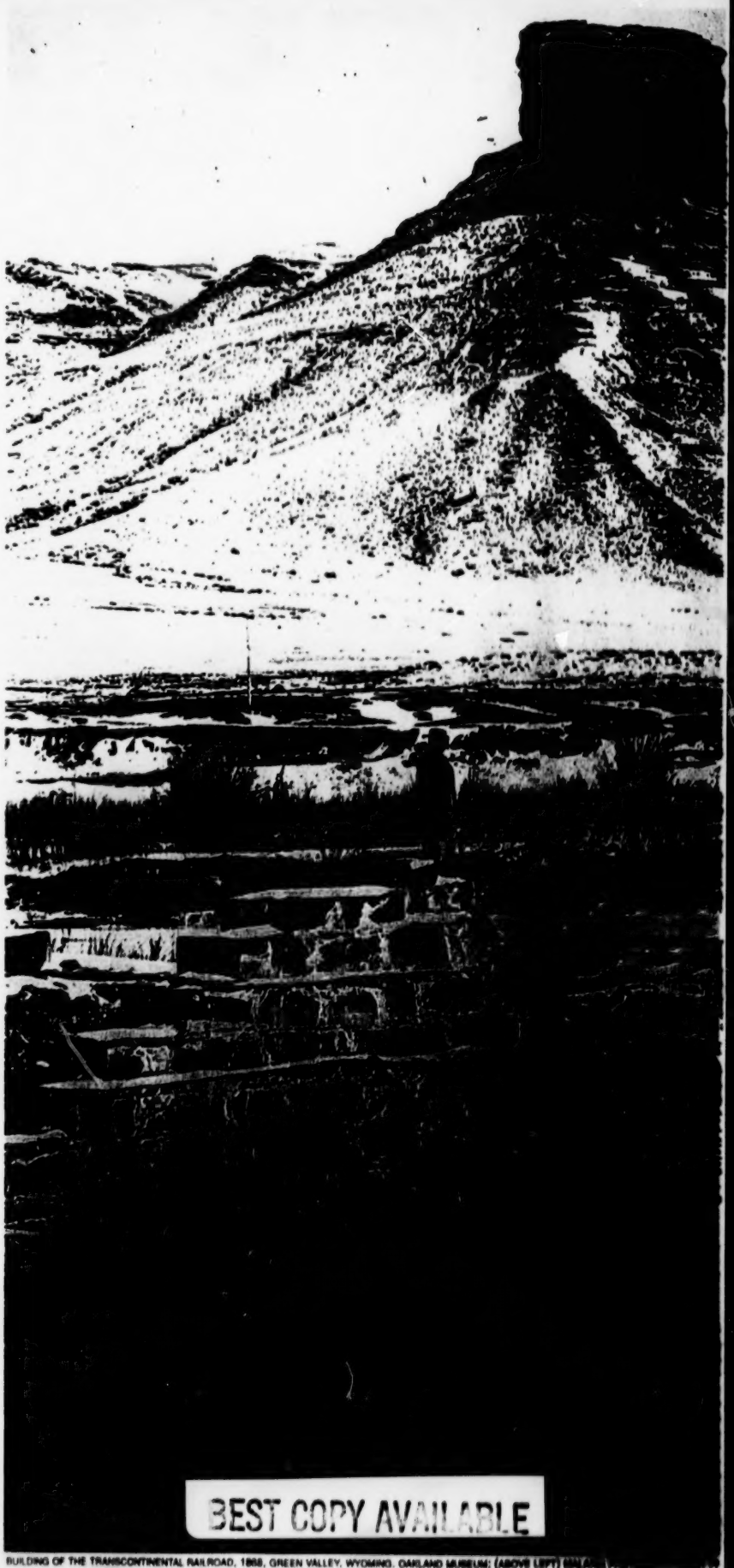
how to apply geography to interpret the past.

18.

how to apply geography to interpret the present and plan for the future.



A BLOOD SAMPLE IS TAKEN TO SEE WHETHER CHOLERA BACTERIA HAVE INFECTED THIS GUINEA-BISSAU WOMAN. MATTHEW NAYTHONS



BEST COPY AVAILABLE

BUILDING OF THE TRANSCONTINENTAL RAILROAD, 1868, GREEN VALLEY, WYOMING. OAKLAND MUSEUM; (ABOVE LEFT)

May 10, 1869, is remembered as the day that the golden spikes made the final link in the 2,000-mile transcontinental railroad. Distance, topography, rock structure, weather—all of these physical barriers had to be overcome by the railroad construction crews. Of equal significance was the lack of timber on the plains. For each mile of track, 2,400 wooden crossties were used; this lumber was transported from back East. In this section of track at Green River, Oregon, the rails are raised up on wooden crossties, consuming even more timber but allowing the track laying to be completed more rapidly. The transcontinental railroad exemplifies how geography may be used to illuminate the past. Similarly geography may be used to illuminate the present and the future—for example, understanding how freeways shape people's lives or how diseases spread.

BEST COPY AVAILABLE

) CELLS. © LENNART NILSSON; (INSET, ABOVE) FOUR-LEVEL INTERCHANGE OF THE SANTA MONICA FREEWAY AND THE HARBOR FREEWAY IN LOS ANGELES, 1982. BRUCE DALE

How a Geography Standard Works

Each standard is grouped within an essential element.

Each standard title is a summary of what the student needs to know and understand about a specific set of ideas and approaches.

Each standard explains exactly what the student should know and understand after completing a particular grade level. In this case, at grade 4, there are three knowledge statements.

Each standard states what the student should be able to do on the basis of this knowledge. In this case, at grade 4, there are four activities, each of which is exemplified by three learning opportunities for students and teachers.

Places and Regions

▶ THE PHYSICAL AND HUMAN CHARACTERISTICS OF PLACES

By the end of the fourth grade, the student knows and understands:

1. **The physical characteristics of places (e.g., landforms, bodies of water, soil, vegetation, and weather and climate)**
2. **The human characteristics of places (e.g., population distributions, settlement patterns, languages, ethnicity, nationality, and religious beliefs)**
3. **How physical and human processes together shape places**

Therefore, the student is able to:

A. **Describe and compare the physical characteristics of places at a variety of scales, local to global, as exemplified by being able to**

Observe and describe the physical characteristics of the local community in words and sketches, using a data-retrieval chart organized by physical features (e.g., landforms, bodies of water, soils, vegetation)

Use a variety of visual materials and data sources (e.g., photographs, satellite-produced images, pictures, tables, charts) to describe the physical characteristics of a region, noting items that have similar distributions (e.g., trees in river valleys)

Use cardboard, wood, clay, or other materials to make a model of a region that shows its physical characteristics (e.g., landforms, bodies of water, vegetation)

B. **Describe and compare the human characteristics of places at a variety of scales, local to global, as exemplified by being able to**

Observe and describe the human characteristics of the local community in words and sketches, using a data-retrieval chart organized by human features (e.g., type of economic activity, type of housing, languages spoken, ethnicity, religion)

Use a variety of visual materials, data sources, and narratives (e.g., photographs, pictures, tables, charts, newspaper stories) to describe the human characteristics of a region and to answer such questions as: Where do people live? What kinds of jobs do they have? How do they spend their leisure time?

Use cardboard, wood, clay, or other materials to make a model of a community that shows its human characteristics (e.g., land-use patterns, areas of settlement, locations of community services)

C. Describe and compare different places at a variety of scales, local to global, as exemplified by being able to

Observe and describe the physical and human characteristics of the local community and compare them to the characteristics of surrounding communities or of communities in other regions of the country

Use a variety of graphic materials and data sources (e.g., photographs, satellite-produced images, tables, charts) to describe the physical and human characteristics of a region, noting items that have similar distributions (e.g., communities are located on major highways)

Use cardboard, wood, clay, or other materials to make a model of a community that shows its physical and human characteristics (e.g., landforms, bodies of water, vegetation, land-use patterns, areas of settlement)

D. Describe and explain the physical and human processes that shape the characteristics of places, as exemplified by being able to

Use maps and other graphic materials to describe the effects of physical and human processes in shaping the landscape (e.g., the effects of erosion and deposition in creating landforms, the effects of agriculture in changing land use and vegetation, the effects of settlement on the building of roads)

Draw maps to show the distribution of population in a region with respect to landforms, climate, vegetation, resources, historic events, or other physical and human characteristics to suggest factors that affect settlement patterns

Keep a daily weather log of wind direction, temperature, precipitation, and general conditions over time to explain some of the factors that affect weather in the local community

The Commission is convinced the following areas represent the common core all students should master: English and language arts, mathematics, science, civics, history, geography, the arts, and foreign languages. This core defines a set of expectations students abroad are routinely expected to meet. American students can meet them as well.

Prisoners of Time, National Education Commission on Time and Learning, 1994

hy, among the oldest areas of
nquiry, is being revitalized in
ted States at a time when the
s being rediscovered through
ols, when the information
ted by geographers from the
ns of space to the depths of the
s is widely recognized as critical
human future, and when there
rong commitment to bring all
rican students to world-class stan-
s in this core academic discipline.

BEST COPY AVAILABLE

BEST COPY AVAILABLE

Geography for Life

Two imperatives drive the national standards for geography. First, geographic understanding must be set into a process of lifelong learning. There is an inseparable and seamless connection among formal educational contexts—preschool, K–12 school, college—and adult life. Second, geographic understanding must be set into life contexts: school, family, society, and occupation.

Therefore, the standards are intended for life: lifelong in terms of commitment and life-enhancing in terms of purpose. Geography is empowering in practical contexts. Geography is enriching in helping us to understand our personal experiences.

The National Geography Standards aim to create a geographically informed person, someone who understands that geography is the study of people, places, and environments from a spatial perspective. Geographically informed persons understand and appreciate the interdependent worlds in which they live. The study of geography has practical value through the application of a spatial view to life situations.

(LEFT) EARTH'S CRUST, © NATIONAL GEOGRAPHIC SOCIETY
(ABOVE) ASTRONAUT ABOVE EARTH, NASA/JAMES A. MCDIVITT
(INSET LEFT) DIVERS AT A LATE BRONZE AGE WRECK OFF THE COAST OF TURKEY, WILLIAM CURTSINGER

What *You* Can Do

Geography is for life in every sense of that expression: lifelong, life-sustaining, and life-enhancing.

That's how geography is introduced in *Geography for Life: National Geography Standards 1994*. But to make that come true for all Americans and all American students is going to require a concerted effort on the part of us all.

By "us," I mean not only teachers, school officials, and legislators but also parents, students, grandparents, aunts, uncles, people in the private sector, people in government, and retirees—in other words, everyone.

What you can do—as one of us—is actively support the idea that knowing geography and learning geography are vital to the national interests and future of the United States. And you should be able to find a variety of ways in which to express your support.

For instance, you could start by learning—or learning more—about geography and geography education. Try contacting your local school board or state department of education, calling the geography department at a nearby college or university, looking for materials at the local library, taking a geography course, or requesting additional information from the Geography Education Standards Project.

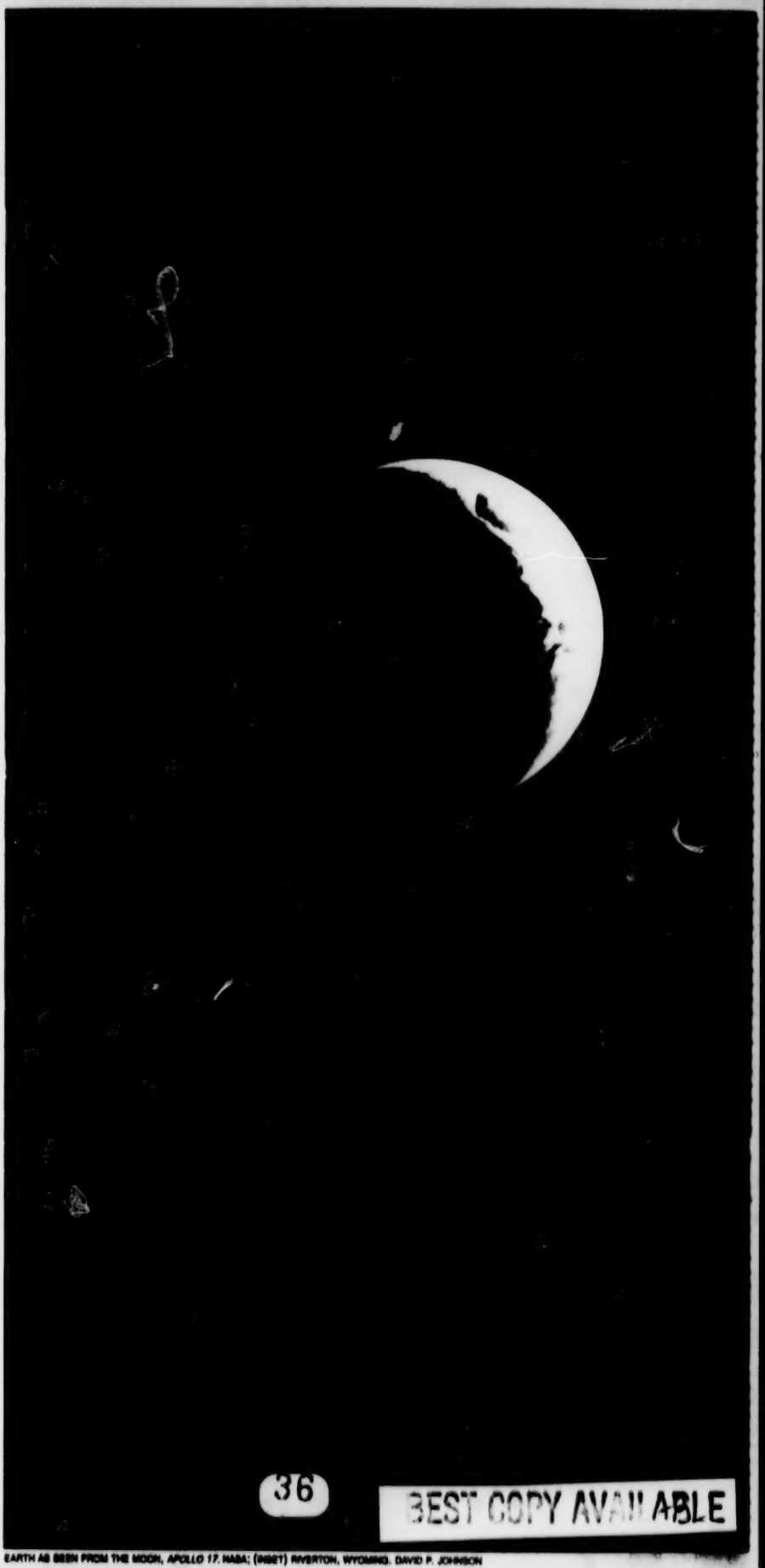
You could then get more deeply involved by, say, studying the National Geography Standards (see the accompanying ordering information) and—if you agree with their purpose and substance—by getting involved in the community dialogue that is inevitably going to be an integral part of the process of translating these standards into curricula.

Please bear in mind that, if our country is to succeed in the global arena of the twenty-first century, geography must be taught as rigorously here as it is in other countries. That's why the standards have been designed to challenge American students—and also, we trust, inspire them.

Whatever you do, please do something. The Americans of the twenty-first century will thank you.

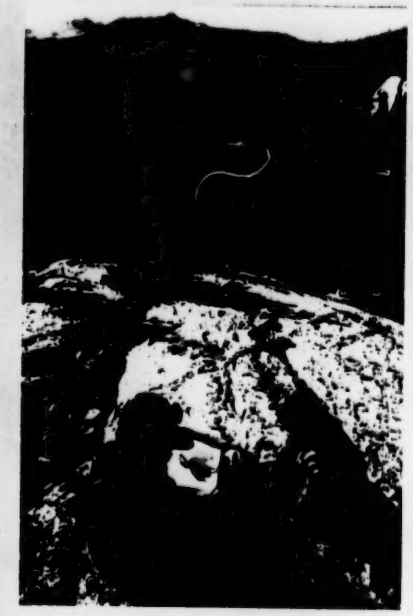
A. R. de Souza

ANTHONY R. DE SOUZA, Executive Director



EARTH AS SEEN FROM THE MOON, *APOLLO 17*. NASA; (INSET) RIVERTON, WYOMING. DAVID P. JOHNSON

BEST COPY AVAILABLE



Earth is our only suitable habitat. Geography's task is to discover and capture its horizons in order to understand how people live and work and utilize resources. This understanding is more urgently required than ever for all students because of new global realities—the interconnected, integrated, and interdependent character of our lives.

The Geography Education Standards Project

The project is a collaborative venture of the American Geographical Society, the Association of American Geographers, the National Council for Geographic Education, and the National Geographic Society.

ANTHONY R. DE SOUZA, Executive Director
National Geographic Society

RUTH I. SHIREY, Project Administrator
National Council for Geographic Education

NORMAN C. BETTIS, Project Co-chair
Illinois State University

CHRISTOPHER L. SALTER, Project Co-chair
University of Missouri

ROGER M. DOWNS, Writing Coordinator
The Pennsylvania State University

AUTHORS

SARAH WITHAM BEDNARZ
Texas A&M University

NORMAN C. BETTIS
Illinois State University

RICHARD G. BOEHM
Southwest Texas State University

ANTHONY R. DE SOUZA
National Geographic Society

ROGER M. DOWNS
The Pennsylvania State University

JAMES F. MARRAN
New Trier High School

ROBERT W. MORRILL
Virginia Polytechnic Institute and State University

CHRISTOPHER L. SALTER
University of Missouri

How to Obtain the Complete Edition of the National Geography Standards:

GEOGRAPHY FOR LIFE: NATIONAL GEOGRAPHY STANDARDS 1994
(product #01775-12160, 272 pages, paperbound)

For fewer than 10 copies: US $9, Canada CAN $16, all other countries US $20. For 10 or more copies: US $8, CAN $13, all other countries US $19. Postage and handling included.

Send your check and a written request with product number and your name, institution, and address to:

NATIONAL GEOGRAPHIC SOCIETY,
P.O. Box 1640, Washington, D.C. 20013-1640, USA

Credit card holders may call
1-800-368-2728 (8 am–5:30 pm, EST)

ANTHONY R. DE SOUZA, Editor
ROGER M. DOWNS, Geography consultant
PAUL ELLIOTT, Editorial consultant
WINFIELD SWANSON, Editorial consultant
GERARD A. VALERIO, Design director
BRIDGET L. SNYDER, Assistant art director
HYLAH L. HILL, Production assistant
ALICE B. GOODMAN, Editorial assistant
HEATHER SCHOFIELD, Administrative assistant
JULIAN WATERS, Calligrapher

What Every Young American Should Know and Be Able to Do in Geography

NATIONAL GEOGRAPHY STANDARDS

Geography is the science of space and place on Earth's surface. Its subject matter is the physical and human phenomena that make up the world's environments and places. Geographers describe the changing patterns of places in words, maps, and geo-graphics, explain how these patterns come to be, and unravel their meaning. Geography's continuing quest is to understand the physical and cultural features of places and their natural settings on the surface of Earth.

FRONT COVER: EARTH SATELLITE CORPORATION; INSETS, LEFT TO RIGHT) SAN FRANCISCO, CA: WILLIAM ALBERT ALLARD; CALCHA, BOLIVIA: LOREN MCINTYRE; MARYLAND: ROBERT MADDEN; PERU: GARY WOLINSKY; THE SAHEL: STEVE MCCURRY; LANCASTER, PA: WILLIAM ALBERT ALLARD; ETHIOPIA: STEVE RAYMER; LAOS: BENY NORASINGH; SIBERIA: STEVE RAYMER; TROBRIAND ISLANDS, NEW GUINEA: PETER ESSICK; NETHERLANDS: FARRELL GRAHAM

ABOVE: © UNPHOTO

38

BEST COPY AVAILABLE

GEOGRAPHY FOR LIFE:
NATIONAL GEOGRAPHY STANDARDS 1994

For fewer than 10 copies: US $9, Canada CAN $16, all other countries US $20. For 10 or more copies: US $8, CAN $15, all other countries US $19. Postage and handling included

PRINTED IN USA
(ISSN 0-7922-2775)

Please print your address below

ADDRESS

CITY STATE / PROVINCE ZIP / POSTAL CODE

NUMBER OF COPIES (01275-12160)

For a copy of the complete National Geography Standards, complete this form and enclose check to:

NATIONAL GEOGRAPHIC SOCIETY
Post Office Box 1640
Washington, DC 20013-1640

(Please allow six weeks for delivery.)
Credit card holders may call 1-800-368-2728 (8–5:30 EST).

12338

FIRST CLASS MAIL
U.S. POSTAGE
PAID
NATIONAL
GEOGRAPHIC
SOCIETY

FIRST CLASS MAIL

39

40